

IN THE SPECIFICATION

Please amend the Specification as follows:

On page 1, before line 5, please insert the following heading:

-- FIELD OF THE INVENTION --

On page 1, before line 19, please insert the following heading:

-- BACKGROUND OF THE INVENTION --

On page 2, before line 23, please insert the following heading:

-- BRIEF SUMMARY OF THE INVENTION --

On page 3, before line 16, please insert the following heading:

-- BRIEF DESCRIPTION OF THE DRAWINGS --

On page 3, before line 20, please insert the following heading:

-- DETAILED DESCRIPTION OF THE INVENTION --

Please amend the paragraph beginning on page 2, line 17, as follows:

These embodiments of a transition between a waveguide structure and a planar structure prove to be relatively complex to ~~realise~~ realize and require the assembly of several parts that must be all the more accurate as the operating frequencies are high. Moreover, they require microwave substrates of good quality to prevent the dielectric losses but for which the cost is high

Please amend the paragraph beginning on page 2, line 27, as follows:

According to the invention, the transition is characterized in that it consists of a ribbed rectangular waveguide ~~realised~~ realized in bar of synthetic material whose metallized base under the rib extends in the form of a foam plate of a synthetic material constituting a substrate for the microstrip line, the rib having a base extending between the upper plane of the ribbed waveguide and the upper plane of the substrate and the microstrip line being disposed on the upper plane of the substrate in the extension of the base of the rib.

Please amend the paragraph beginning on page 4, line 18, as follows:

As shown in Figure 1, the base of the rib 6, at the junction with the microstrip line 7, is at a distance E from the ground plane of the microstrip line, ~~this~~ This distance E corresponding to the thickness of the substrate at the junction with the ribbed waveguide.

Please amend the paragraph beginning on page 4, line 25, as follows:

The rib 6 is ~~centred~~ centered in the width of the foam bar and its dimensions can be adjusted according to the operating frequency range required by ensuring an adequate gradual passage from the quasi-TEM propagation mode of the microstrip line to the fundamental mode of the guide. Such a gradual passage is obtained according to a given profile, linear, exponential or other. In general, the minimum length of the profile obtained to ensure correct matching over the entire operating range must be in the order of a fraction of the wavelength (for example, a quarter of the wavelength) corresponding to the lowest frequency.

Please amend the paragraph beginning on page 5, line 23, as follows:

Figures 2 to 4 illustrate a method of producing the transition according to the invention in foam technology. A foam bar 20 is previously given a rectangular form in a transversal cross-section with dimensions that correspond to the inner dimensions of a rectangular waveguide for an operation that is theoretically monomodal in the frequency range required. Then, the foam bar is worked by machining, thermoforming, stamping or other methods to form the rib 6, as shown in Figure 3. The operation of delimiting the rib 6 in the section of the waveguide G can be prolonged at the level of the section of the microstrip line 7, as shown in Figure 3. The foam block 20 can then be fully metallized, the metallization of the rib and the formation of the microstrip line being obtained simultaneously. A non-directive metallization by projection or brush can be used. Then, the foam block is cut transversally at the extremity of the rib 6 to obtain the substrate 5 (see Figure 4) in plate shape of the microstrip line.